

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Original) A semiconductor device, comprising:
a semiconductor base comprising a first semiconductor region having a first conductivity type, a second semiconductor region having a second conductivity type formed in a surface region of said first semiconductor region, and a third semiconductor region having the first conductivity type formed in a surface region of said second semiconductor region; and
a first electrode formed on said second semiconductor region sandwiched between said first semiconductor region and said third semiconductor region,
wherein: a first region, in which said third semiconductor region occupies said second semiconductor region at a first rate, is formed at a center of said semiconductor base, and
a second region, in which said third semiconductor region occupies said second semiconductor region at a second rate larger than said first rate, is formed at a circumference of said semiconductor base so as to enclose said first region.
2. (Original) The semiconductor device according to claim 1,
wherein there are a plurality of said third semiconductor region, which are formed to be spaced from each other.
3. (Original) The semiconductor device according to claim 1,
wherein said second semiconductor region is formed in a belt shape.
4. (Original) The semiconductor device according to claim 3,
wherein there are a plurality of said second semiconductor region, which are formed side by side with a space therebetween.
5. (Original) The semiconductor device according to claim 1,

wherein an impurity concentration of said second semiconductor region is relatively high at a center part of said semiconductor base, and relatively low at a peripheral part thereof.

6. (Original) The semiconductor device according to claim 1,
wherein said first electrode is formed on said second semiconductor region via an insulating film, and a film thickness of said insulating film is relatively thick at a center part of said semiconductor base, and relatively thin at a peripheral part thereof.

7. (Withdrawn) A semiconductor device, comprising a semiconductor base including a first semiconductor region having a first conductivity type, a second semiconductor region having a second conductivity type formed in a surface region of said first semiconductor region, and a third semiconductor region having the first conductivity type formed in a surface region of said second semiconductor region,

wherein said third semiconductor region is formed along a first direction such that a rate at which it occupies said second semiconductor region is larger at a peripheral part of said semiconductor base than at a center part thereof, and formed along a second direction perpendicular to said first direction such that a rate at which said third semiconductor region occupies said second semiconductor region is larger at said peripheral part of said semiconductor base than at said center part thereof.

8. (Withdrawn) The semiconductor device according to claim 7,
wherein said second semiconductor region is formed in a belt shape, and said first direction is defined in parallel with an extending direction of said second semiconductor region.

9. (Withdrawn) The semiconductor device according to claim 7,
wherein said second semiconductor region is formed in an island shape, and said first direction is defined in parallel with or perpendicularly to a part of edges of said semiconductor device.

10. (Withdrawn) A semiconductor device, comprising:

a semiconductor base comprising a first semiconductor region having a first conductivity type, a second semiconductor region having a second conductivity type formed in a surface region of said first semiconductor region, and a third semiconductor region having the first conductivity type formed in a surface region of said second semiconductor region;

an insulating film formed on said second semiconductor region sandwiched between said first semiconductor region and said third semiconductor region; and

a first electrode formed on said insulating film,

wherein said insulating film comprises a first region formed at a center region of said semiconductor base to have a first thickness, and a second region formed to have a second thickness thinner than said first region at a circumference of said semiconductor base so as to enclose said first region.

11. (Withdrawn) A semiconductor device, comprising:

a semiconductor base comprising a first semiconductor region having a first conductivity type, a second semiconductor region having a second conductivity type formed in a surface region of said first semiconductor region, and a third semiconductor region having the first conductivity type formed in a surface region of said second semiconductor region;

an insulating film formed on said second semiconductor region sandwiched between said first semiconductor region and said third semiconductor region; and

a first electrode formed on said insulating film,

wherein said second semiconductor region comprises a first region formed at a center of said semiconductor base to have a first impurity concentration, and a second region formed to have a second impurity concentration lower than said first impurity concentration at a circumference of said semiconductor base so as to enclose said first region.